# University of Pennsylvania

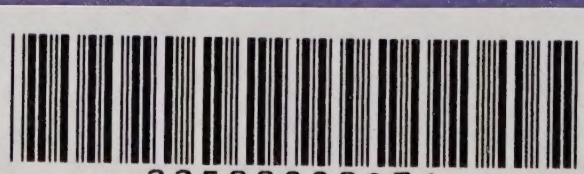
# DEDICATION

of the Laboratories of Pathology, Physiology and Pharmacology

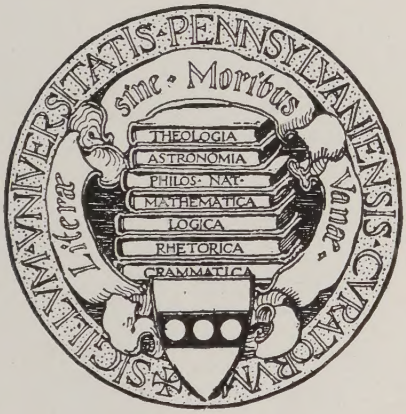
JUNE 10, 1904

# STREET GUIDE

TO reach the University, take cars on Walnut Street marked "Angora" or "Darby," leave the car at 34th and Woodland Avenue. Houston Hall is on Spruce Street, one block south of Woodland Avenue and between 34th and 36th Streets. The New Laboratories face Hamilton's Walk, which is one block south of Spruce Street and between 36th and 37th Streets.


22500880936

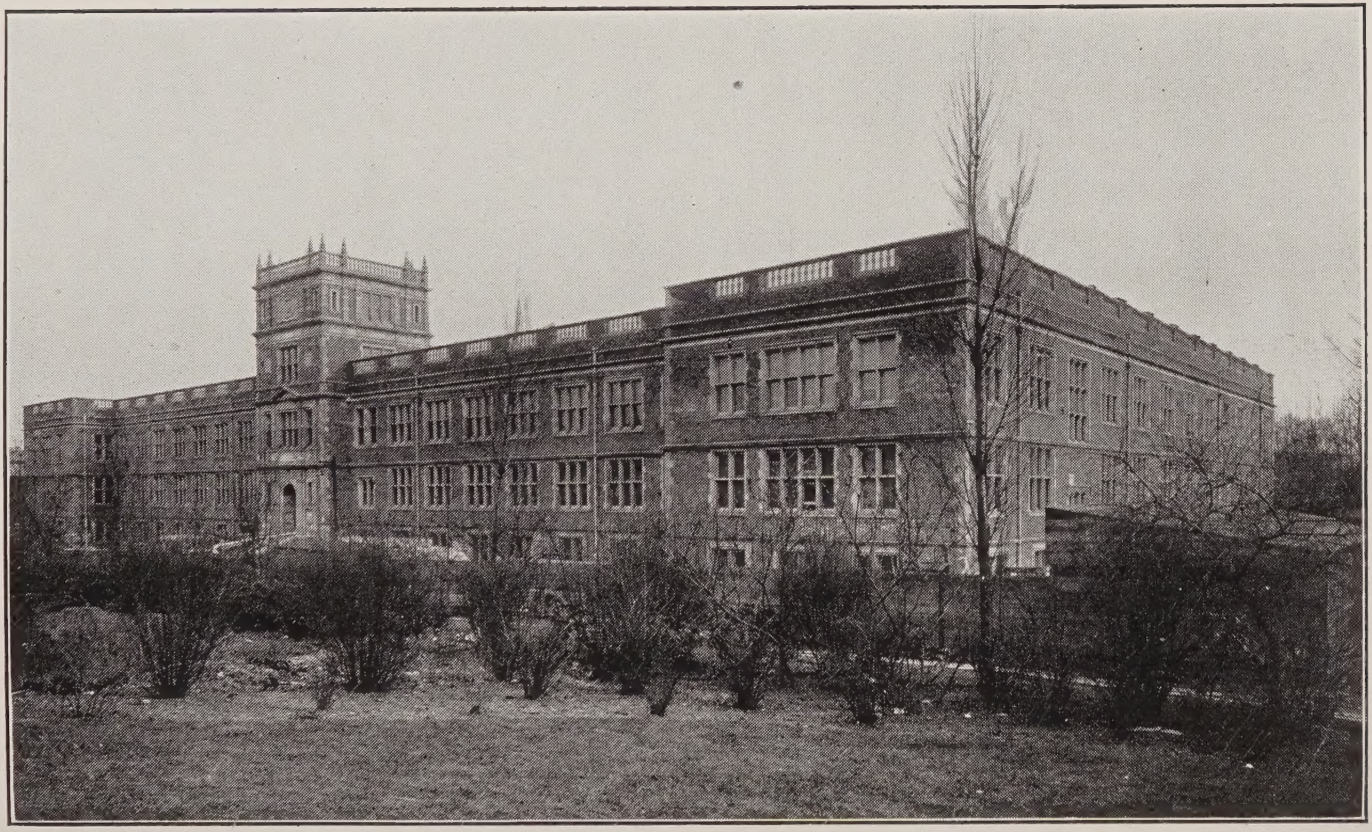
# University of Pennsylvania




## DEDICATION

of the Laboratories of Pathology, Physiology and Pharmacology

JUNE 10, 1904



The New Laboratories

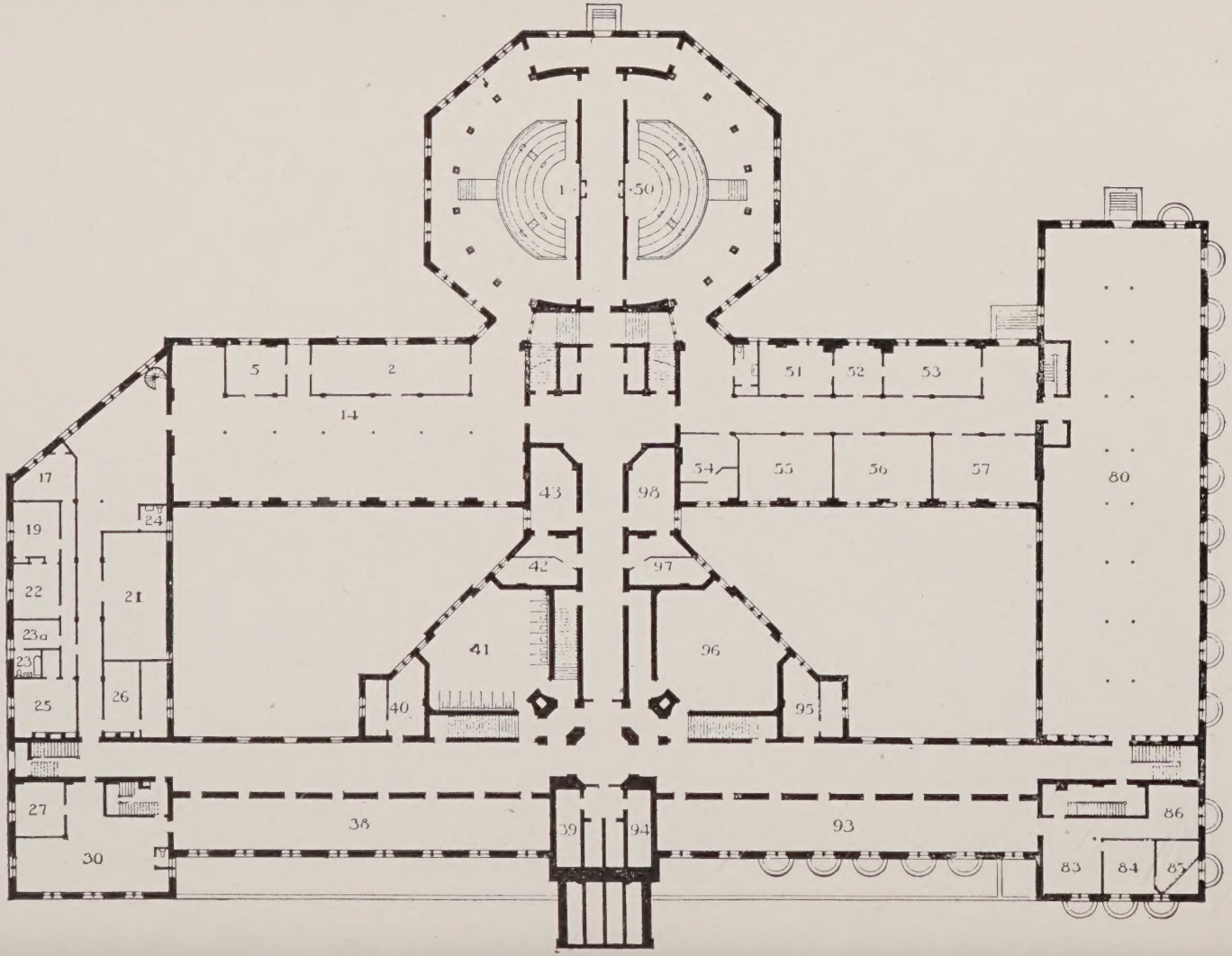
# INSPECTION OF THE LABORATORIES

---

The new Laboratories of Pathology, Physiology and Pharmacology will be open for inspection from 10 a. m. to 3 p. m. on June 10th.

A number of interesting exhibits will be displayed in the different portions of the Laboratory. The equipment of the several departments will be shown to those interested.

MO=pam
W19
FP4
1904
U58d


1
50
5
2
14
51
52
53
17
19
22
23a
23
25
24
21
26
43
42
41
40
98
97
96
95
54
55
56
57
80
27
30
38
39
94
93
86
83
84
85

Basement

# The Place of Laboratories in Medical Teaching

THE method of medical teaching underwent a complete change during the last quarter of the nineteenth century by reason of the fact that the scientific branches, physiology, anatomy, chemistry, pathology, pharmacology and bacteriology reached a grade of completeness that made the old didactic method wholly inadequate. As long as the science of medicine was crude and unfinished and theories occupied the place of demonstrable facts, laboratories and practical work were of no great importance. The development of an exact science demands practical exposition in the teaching of that science, and so laboratories became a necessity.

## *The Old Method of Teaching—1765-1868*

For a hundred years after the establishment of the medical department of the University of Pennsylvania the course of instruction was but little changed. Didactic lectures given to large classes and with no attempt at such gradation that the senior student might have more advanced instruction than the junior formed the essential basis of the medical course. General clinics at the Pennsylvania and the Philadelphia Hospital formed a part, at first optional and later obligatory, of the curriculum; but teaching at the bedside and practical work in laboratories were unknown. It is true that for a short time in the beginning, when the classes were small, students accompanied the professors in their rounds through the wards of the Pennsylvania Hospital; but the growth of the classes soon made this impossible.

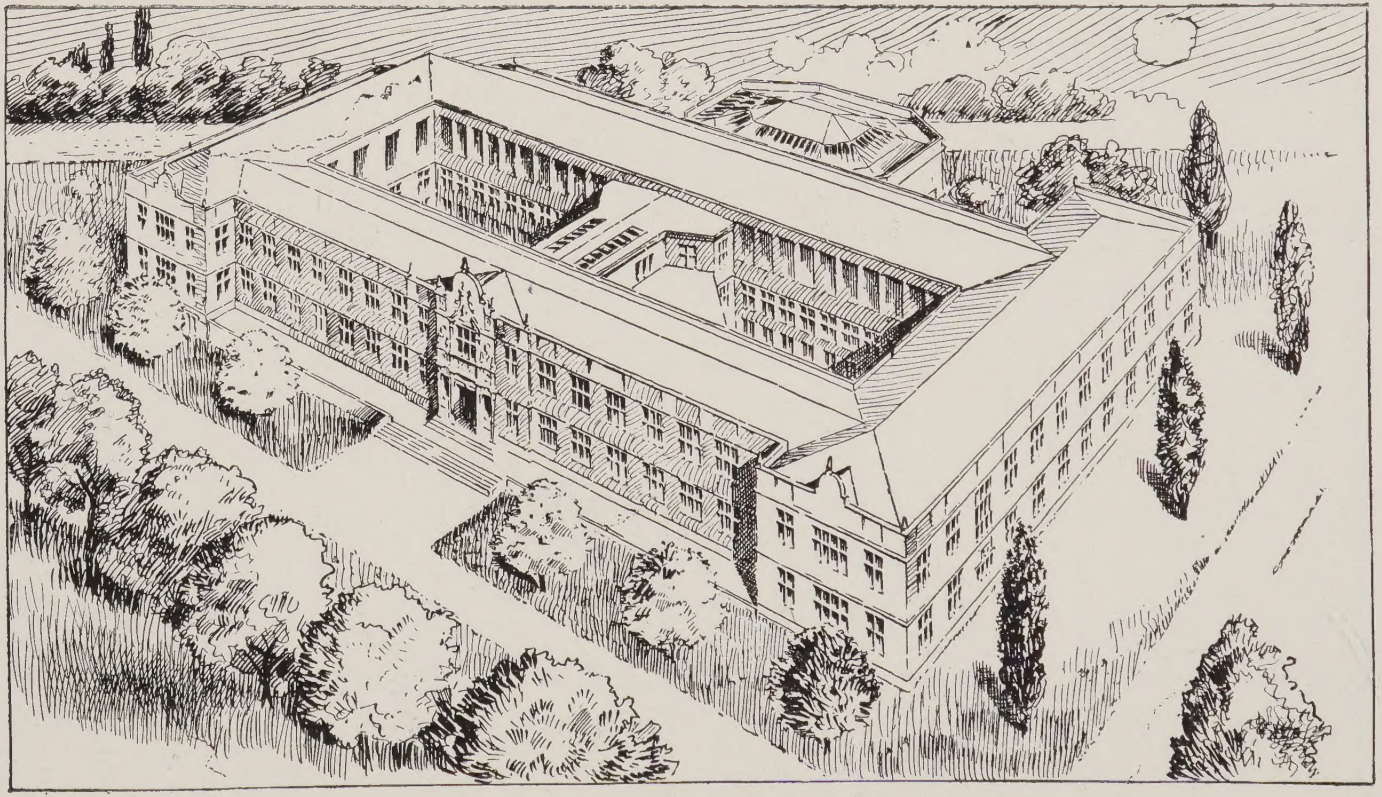
## *The Beginning of the New Method—1868-1877*

It is a noteworthy fact that the beginning of the new method occurred exactly one hundred years after the first class was graduated from the medical department. This class was graduated in 1768 and in 1868 demonstrative lectures in pathology and in microscopy marked

the beginning of the new era. In the five succeeding years (1868-1873) laboratories of chemistry, physiology, histology, pathological anatomy and pharmacology were established for the use of the students. During the four years from 1873 to 1877 the laboratories were more fully equipped. As in many other important steps, the University of Pennsylvania was a pioneer in the institution of such laboratories and the practical teaching given in them. At the time mentioned, few, if any, of the schools in Europe and probably none in America were equipped with laboratories for the instruction of undergraduate students.

## *The Development of the Laboratory Method—1877-1903*

The completion of the new medical department in West Philadelphia and its active operation date from 1877. The facilities for practical teaching were then unexcelled at any institution and were regarded as ample for 25 or 50 years. As a matter of fact, the intervening quarter of a century, with its unparalleled advances in science and the consequent increased demand for practical teaching, proved the need of further enlargement and the new laboratories are the University's response to this need. During this quarter of a century no medical school has been more alert in recognizing the growing importance of practical scientific teaching. One after another laboratory courses were instituted and enlarged until the available time of the student and the space in the laboratories were taxed to the utmost. The old two years' course was increased to three and later to four years; some additional space was found in Medical Hall by the building of a separate Department of Hygiene and the transfer of bacteriological teaching to that department and by the removal of the Wistar and Horner Museum to the new and unequalled Wistar Institute; but finally, despite every effort, a new laboratory building became imperative, and its formal opening is about to be celebrated.



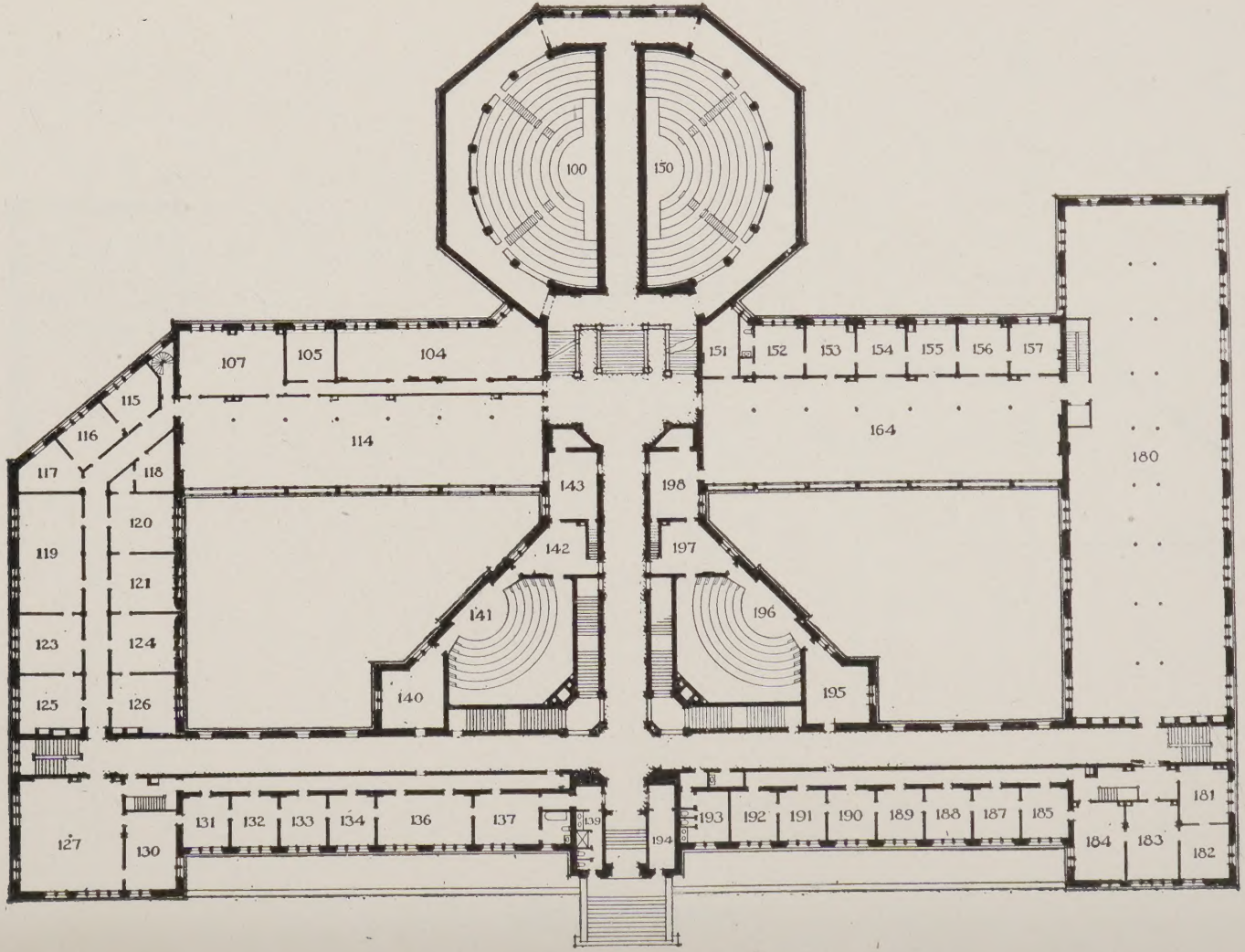
Birdseye View of New Laboratories

# The New Laboratories of Pathology, Pharmacology and Physiology

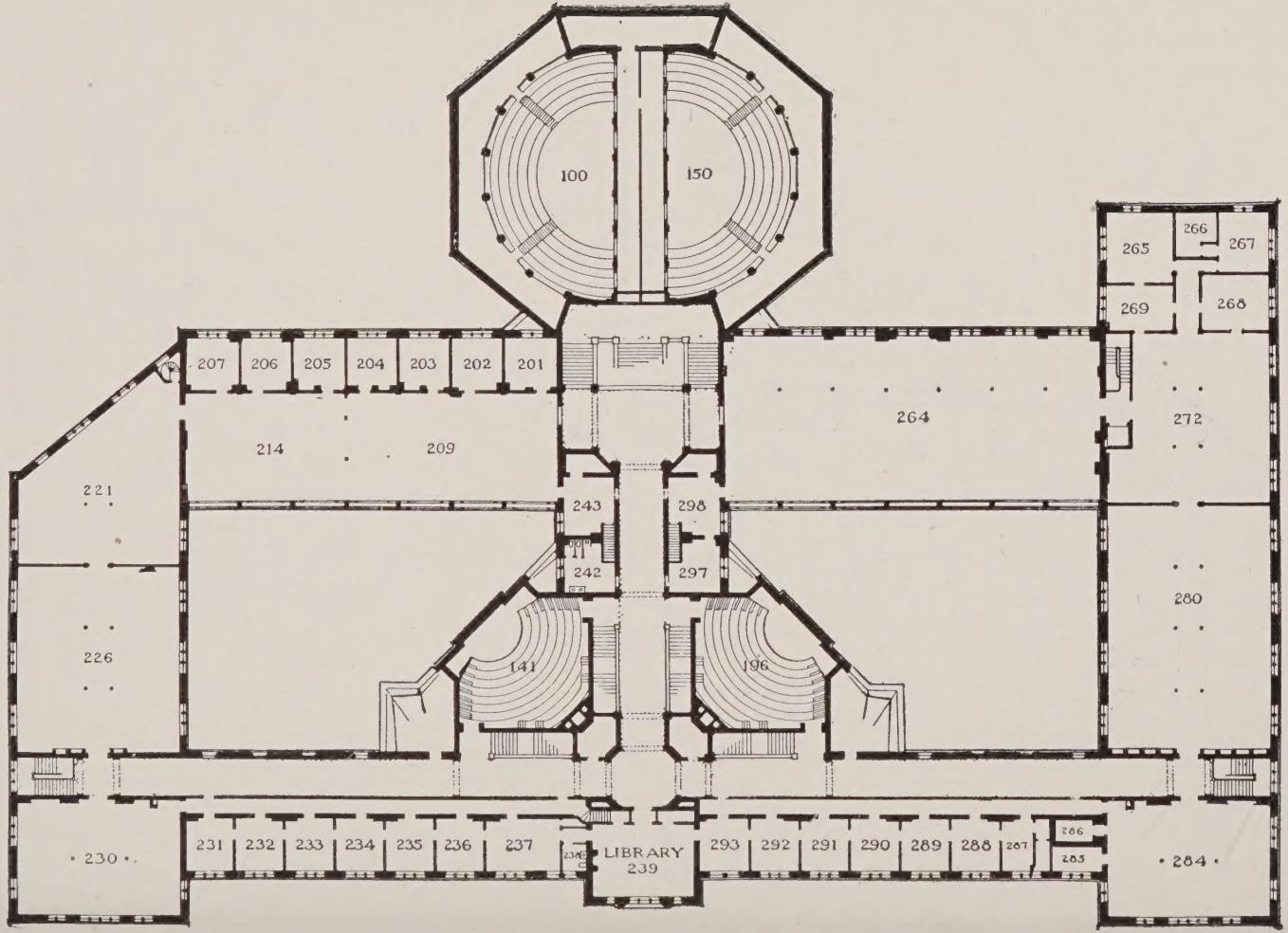
THE NEW LABORATORY BUILDING is quadrangular in shape and is on the south side of Hamilton's Walk, between Thirty-sixth and Thirty-seventh Streets. The building is two stories in height above a high basement and measures 340 feet front by nearly 200 feet in depth. The long front faces north, securing a maximum amount of the best light for laboratory purposes. All along the front are arranged small rooms for research, rooms for professors and their assistants, a library, etc. These open into a private corridor, so that men employed in these rooms may pursue their work without interruption from students passing through the main halls.

The first floor of the new laboratories will be devoted to physiology and pharmacology. The portion assigned to the former consists of one large laboratory for practical instruction, one for general research work, twenty rooms devoted to sub-section teaching, research work, rooms for professors, etc. The section which will be devoted to pharmacology consists of one large laboratory for practical pharmacodynamics, a laboratory for teaching practical pharmacy, 44 feet by 142 feet; another for general pharmacodynamics, 44 feet by 65 feet; besides a museum and ten rooms for original research work, etc.

The second floor will be devoted exclusively to pathology. The entire north front of the building is devoted to laboratories for advanced students in pathology and pathological bacteriology, and to the special research and assistants' rooms. Each of the advanced laboratories measures 31 feet by 44 feet. The east wing accommodates the laboratory of experimental pathology, while the west wing is occupied by the museum of pathological specimens. This latter, which measures 44 feet by 65 feet, adjoins the demonstration hall of morbid anatomy, which hall communicates with the general pathological-histo-




First Floor Plan




Second Floor Plan

logical laboratory. The latter laboratory, the front of which is to consist almost entirely of glass, is located in a section of the building looking north into a spacious court. This room, 37 feet by 100 feet, will seat one hundred students, and will be devoted entirely to microscopical work, for which, on account of the excellent lighting, it will be admirably adapted. In order to combine in one harmonious whole the study of the microscopical features of the diseased organs and the gross alterations in them, the pathological-histological laboratory, the laboratory of morbid or gross pathological anatomy, and the museum of pathology are made closely communicating and freely accessible one from the other. Another section of the building, of equal size with the first, and also looking north into the court, is subdivided into two smaller laboratories for instruction in neuro-pathology (pathology of the nervous system), surgical pathology and practical clinical pathology (the examinations of secretions and excretions of patients). Finally, the west wing of the building will also provide for photographic and microphotographic outfits. The capacity of the laboratories, the number of research rooms, and the provision for securing abundant light at all seasons, mark it as modern beyond comparison. There are four lecture rooms in the building. The two known as "Demonstration Rooms" each seat 185 students. At the rear of the building there are two large lecture rooms, each seating 400 students. To avoid confusion between lectures the corridors and stairways are so arranged that one class may enter the large lecture room from one side as the other class leaves it from the opposite side.

The architectural construction of the entire group corresponds with that of the dormitories of the University, the same architects having designed the new laboratories.

50715

# Committee on Arrangements

Dr. Francis W. Bennett
" Thomas F. Branson
" Radcliffe Cheston
" Walter Chrystie
" Roland G. Curtin
" G. E. de Schweinitz
" Samuel G. Dixon
" Norton Downs
" Edward L. Duer
" David M. Edsall
" Charles H. Frazier
" John H. Girvin
" Samuel McC. Hamill
" Richard H. Harte
" P. B. Hawk
" A. O. J. Kelly
" Samuel W. Latta
" Robert G. LeConte
" Leo Loeb
" Alexander Marcy, Jr.
" Edward Martin
" Philip Marvel
" John K. Mitchell
" Charles K. Mills
" John H. Musser
" Henry Norris

Dr. Richard C. Norris
" Francis R. Packard
" R. A. F. Penrose
" William Pepper
" William C. Posey
" Thomas C. Potter
" Edwin T. Reichert
" David Riesman
" Joseph Sailer
" J. Alison Scott
" William T. Sharpless
" Wharton Sinkler
" Allen J. Smith
" Louis Starr
" Alfred Stengel
" Colin C. Stewart
" George C. Stout
" William J. Taylor
" James Tyson
" J. William White
" H. H. Whitcomb
" DeForest Willard
" Horatio C. Wood
" Horatio C. Wood, Jr.
" George Woodward
" James K. Young

DR. HORATIO C. WOOD, *Chairman.*

GEORGE E. NITZSCHE, *Secretary,*
Houston Hall.

# A Series of Lectures Clinics and Demonstrations

to which are invited the members of the American Medical Association who may be visiting Philadelphia, on their way to or from the Association meeting at Atlantic City, will be given June 3d, 4th, 6th, 11th, 13th and 14th, under the auspices of the Department of Medicine, University of Pennsylvania.

Those desiring to attend may obtain a program by applying to the Dean of the Department of Medicine.

Made at the Sign of the Ivy Leaf in Philadelphia